

## ABSTRACT OF THE DISCLOSURE

An infusion sleeve of an ultrasonic vibrating needle. The sleeve is collapsible and serrated or scalloped at a distal end. Fluid flows through a passage between the needle and the infusion sleeve in a direction from the proximal end of the sleeve to a distal end of the sleeve. Upon reaching the distal end, the fluid emerges by flowing across valley formations that are between peak formations of the distal end of the infusion sleeve. The peak formations abut the exterior of the incision so that the fluid flow cools tissue at the incision and the needle.